

City of Tacoma



Fats Oils and Grease Program

1. INTRODUCTION	2
1.1 APPLICABILITY	2
1.2 STATEMENT OF PROBLEM.....	2
2. PRETREATMENT OF WASTEWATER.....	2
2.1 NEW CONSTRUCTION.....	3
2.2 REMODEL OF EXISTING ESTABLISHMENTS.....	3
3. RESTAURANT BILLING RATES	4
3.1 RESTAURANT RATE I REQUIREMENTS	4
4. MAINTENANCE	4
4.1 GGI CLEANING STANDARDS	4
4.2 HGI CLEANING STANDARDS.....	5
4.3 DOCUMENTATION OF MAINTENANCE.....	5
4.4 BEST MANAGEMENT PRACTICES	6
4.5 INTERCEPTOR ADDITIVES	6
4.6 EXHAUST MAINTENANCE (INCLUDING HOODS, FILTERS, DUCTS AND FANS).....	6
4.7 GUIDANCE FOR WORKING WITH GREASE HAULING COMPANIES	7
5. CONCLUSION	ERROR! BOOKMARK NOT DEFINED.
6. LEGAL AUTHORITY	7
7. DEFINITIONS.....	7

1. Introduction

The purpose of this policy is to protect the City of Tacoma's collection systems, pumping stations, and treatment works from excessive Fats, Oil and Grease (FOG) by ensuring that Food Service Establishments (FSE) are in compliance with the requirements of the Tacoma Municipal Code (TMC) Chapter 12.08 Wastewater and Surface Water Regulation and Rates.

The accumulation of FOG in the collection system causes blockages which may lead to Sanitary Sewer Overflows (SSO). SSOs can lead to the degradation of water quality in the receiving water body, adversely impact sanitary conveyance and treatment operations, and/or the provisions contained in the City of Tacoma's (City) Wastewater Pretreatment Program. FOG blockages may also cause sewer back-ups into homes and businesses thereby causing property damage and the disruption of business activities.

1.1 Applicability

The City maintains and operates two wastewater treatment plants [Central Wastewater Treatment Plant #1 (CTP) and North End Wastewater Treatment Plant #3 (NETP)], approximately 700 miles of wastewater sewer mains and 45 pump stations. Each treatment plant is regulated under separate WDOE permits with regulations for the Wastewater Pretreatment Program under both. The provisions of this policy apply to all owner/operators of FOG generating facilities discharging to the City's wastewater sewer, including discharges from the interlocal agreement areas of Fife, Fircrest, Ruston and portions of Pierce County.

The intent of this policy is to authorize City of Tacoma staff to establish procedures and/or guidelines to regulate FSE operations, as well as the reporting of FOG wastes pumped from FSE pre-treatment devices that control FOG during routine maintenance. The authority for this policy is contained in TMC 12.08. Enforcement actions taken under this policy will be in accordance with the Wastewater Pretreatment Program's Enforcement Response Plan (ERP).

1.2 Statement of Problem

FOG tends to coat kitchen equipment (pots, utensils, etc.) and/or dishware that it comes into contact with. When these items are washed, the FOG is discharged to the wastewater collection system. When discharged to the sewers, FOG can build up and accumulate on the surface of the pipes restricting the flow of wastewater through the collection system. Eventually the FOG can completely block sewer pipes causing the wastewater to back up and overflow from the collection system onto the ground, into waterways, or into homes or buildings. These sanitary sewer overflows (SSO) can endanger both the public health and the surrounding environment.

2. Pretreatment of Wastewater

FSEs shall install and maintain appropriately sized pretreatment devices that control FOG (FOG devices) in accordance with the provisions of this policy and related design standards, guidelines and/or procedures. FOG devices shall be installed, operated, properly maintained and repaired at the sole expense of the FSE owner/operator.

2.1 New Construction

All new FSEs that generate FOG must have an appropriately sized Gravity Grease Interceptor (GGI) installed per the City of Tacoma's Grease Interceptor Sizing and Installation Policy and the UPC.

New multi-unit or "strip mall" facility owners shall contact the City prior to conducting private plumbing work at the site. Multi-unit facility owners, or their designated contractor, shall have plans for separate private wastewater lines for kitchen and sanitary wastewater for each "individual" unit. In addition, the plans shall identify "stub-out" locations to accommodate a minimum 1,000 gallon grease interceptor for each unit of the multi-unit facility. New multi-unit facility, or new "strip mall" facility owners shall consider suitable physical property space and sewer gradient that will be conducive to the installation of an exterior, in-ground GGI when determining the building location.

Hydromechanical Grease Interceptors (HGIs) will not be allowed in new construction unless the preceding provisions for a GGI reserve have been met and a professional engineer determines that a GGI would not protect the City's sanitary assets better than a HGI.

2.2 Remodel of Existing Establishments

Operational changes, structural changes and special conditions at an FSE may require the installation of new or additional FOG protection. New or additional FOG devices must be designed and constructed in accordance with the City of Tacoma's Grease Interceptor Sizing and Installation Policy. The following changes may require additional FOG protection:

- An Increase of seating capacity of 10% or more
- An addition of a drive-through window,
- Existing equipment is increased in size,
- The total cost of remodel or series of remodels exceeds 60 percent of the value of the FSE,
- Evidence of excessive FOG build-up is documented in the collection system from the FSE,
- Changes in menu from a non- FOG generating establishment to one that generates or has the potential to generate FOG, and/or
- Installation of a garbage disposal.

3. Restaurant Billing Rates

FSEs are billed for wastewater discharges as part of the Commercial/Industrial Wastewater User Group for billing rates. The billing rates for FSEs can be found in “Table II Rates for Commercial and/or Industrial User Groups” in Chapter 12.08.400 of the Municipal Code. FSEs are assigned a rate based on the strength, or Biochemical Oxygen Demand of their wastewater. All FSEs are assigned a rate within one of the following categories:

- Restaurant Rate II (higher rate)
- Restaurant Rate I (lower rate)

3.1 Restaurant Rate I Requirements

To qualify for the lower Restaurant Rate I billing rate, the FSE must meet the following requirements:

1. Provide documentation the FSE has an approved FOG device that meets the current Uniform Plumbing Code.
2. Sign the cleaning log certifying that all maintenance activities of FOG devices were observed by restaurant staff, the owner, or manager.
3. Comply with City of Tacoma inspection and reporting requirements.

The Restaurant Rate Reduction Program is voluntary. All newly opened restaurants will receive a letter to notify them of the two rates and the option to participate in the Restaurant Rate Program for reduction of their wastewater bill. It is the restaurants responsibility to contact the Program Administrator to receive additional information. Billing is adjusted to the lower rate once required documents are received and approved.

4. Maintenance

There are two types of FOG devices, the Gravity Grease Interceptor (GGI) and the Hydromechanical Grease Interceptor (HGI). GGI are designed to manage a large volume of FOG while HGI are smaller units that generally need more frequent maintenance.

4.1 GGI Cleaning Standards

All GGIs are required to be pumped and cleaned by vendor licensed to do business in the City of Tacoma. Self-cleaning a GGI is not allowed. The frequency of required cleaning is based on the size of the grease device and the amount of grease produced at a specific FSE. **At a minimum the grease device must be cleaned twice a year.** The following conditions trigger the need for maintenance:

- When FOG or solids together exceed 25% of any of the compartments capacity and/or,
- When FOG is observed in the outlet pipe.

When cleaning a GGI, the licensed pumper must comply with the following standards:

- The GGI must be pumped out completely,
- All accumulated grease must be removed from the walls,
- All visible grease and debris from inside the inlet, cross over, and outlet tees must be removed,
- Inspect the condition of tank walls, baffles, and piping,
- The GGI must be recharged with clean water, and
- Complete all required documentation (see section 4.3).

4.2 HGI Cleaning Standards

All HGIs are required to be cleaned regularly. Similar to the GGI, the frequency of required cleaning is dependent upon the size of the HGI and the amount of grease produced at a specific FSE. **At minimum, an HGI must be cleaned once a month.** The following conditions trigger the need for maintenance:

- When solids exceed 25% of the interceptor's capacity,
- When grease is observed in the outlet pipe, or

When cleaning an HGI, the following standards must be met:

- The HGI must be pumped out completely,
- Detachable baffles must be removed and all grease and solids removed from the surfaces of the tank and baffles,
- Inlet and outlet tees must be inspected, and grease collected from a HGI shall be picked up for final disposal by a contractor, or absorbed of all free liquid with a dry absorbent and disposed of as solid waste. **Never flush collected grease down the toilet.**

For self-cleaners of HGI devices, every 3 months the device shall be cleaned by a licensed pumper and required documentation completed (see Section 4.3).

4.3 Documentation of Maintenance

For every GGI/HGI maintenance event by a licensed service provider, an electronic submittal of maintenance activities through OnlineRME shall be required in addition to maintaining "Hard-Copy" maintenance/cleaning logs on site.

All electronic submittals must be recorded in the OnlineRME database within seven days of servicing. The hard-copy maintenance/cleaning logs shall be maintained on site at the FSE and be available for review by City staff for a period of five (5) years. The

OnlineRME report and maintenance/cleaning log must contain the following information:

- The date of maintenance,
- The company and/or employee's name conducting the maintenance,
- The thickness of the grease mat floating on the top of the liquid,
- The thickness of the settled material on the bottom of the device,
- The total depth of the tank's working volume,
- The amount of material removed from the device, and
- The condition of its components as indicated by the employee conducting maintenance.

4.4 Best Management Practices

The Owner/Operator is solely responsible for all costs associated with the cleaning and maintenance of the FOG device(s). Owner/operator maintenance costs and disposal costs will be minimized if the FSE uses Best Management Practices (BMPs) to control the discharge of grease and solids to the FOG device(s). By reducing the amount of FOG discharged, a FSE may be able to reduce the cleaning frequency of the FOG device. The following is a list of suggested BMPs for FSEs to implement:

- Train all kitchen staff in proper BMPs and explain the environmental impacts of grease in the sewer system.
- "Dry wipe" pots, pans, and dishware prior to dishwashing.
- Post BMP signs in kitchens and near sinks.
- Store a grease disposal container in an easy access area for staff. Follow up to ensure staff properly disposes of grease.
- Provide periodic re-enforcement on proper disposal of FOG with staff.

4.5 Interceptor Additives

The City of Tacoma does not allow the use of hot water (not to exceed 140 degrees), steam, chemicals, or biological additives in the normal course of operations that will cause the release of fats, oils and grease from the grease trap/interceptor to the wastewater collection system.

4.6 Exhaust Maintenance (Including hoods, filters, ducts and fans)

When exhaust cleaning and maintenance is conducted, the FSE shall ensure that grease is not discharged to the wastewater or stormwater collection systems. The City requires that the contaminated wastewater either be collected and properly disposed of offsite by a professional licensed cleaning company or that the professional licensed cleaning company implements the following BMPs prior to discharging to the sanitary system:

- The discharged wastewater has a pH between 5.5 and 11.0 prior to disposal,
- The wastewater discharge temperature is less than 140° F,
- The wastewater passes through a FOG Removal Unit,
- The solids are strained from the liquid prior to discharge and disposed as solid waste, and
- All cleaning shall be conducted to ensure that no wastewater enters the stormwater collection system.

4.7 Guidance for Working with Grease Hauling Companies

Grease trap/interceptor maintenance providers may be found in the phone book under Septic Tank Cleaning as well as on the City of Tacoma's "Sanitary and Stormwater Systems Cleaning and Sweeping Services" handout. Work closely with your provider to ensure your interceptor is serviced at the proper frequency and all required paperwork is completed per the guidelines discussed in section 4.3.

Maintenance providers must leave a copy of each maintenance report and all other maintenance documentation with the FSE upon completion of work.

5. Legal Authority

The City's legal authority for requiring food preparation facilities to manage the FOG they generate in a proper manner is found in the following six sections of the Tacoma Municipal Code (TMC):

- TMC 2.06.010 and TMC 2.06.030 authorize the City to require compliance with provisions of the Uniform Plumbing Code as amended and adopted by the State of Washington and the City of Tacoma. Proper grease management is discussed in section 1014.0, and Appendix H.
- TMC 12.08.020.B.4 prohibits the discharge of any solid or viscous substance capable of obstructing the flow of wastewater or interfering with the operations of the municipal sewer system.
- TMC 12.08.040.D requires the owners of grease traps and interceptors to properly operate and maintain these devices to prevent interference, excessive discharge, or restricted flow. This section also requires maintenance and disposal records be kept on site for inspection by the Director.
- TMC 12.08.610 authorizes the City to assess supplemental service charges in an amount equal to the City's direct and consequential costs against the owner or owners and against the premises from which the discharge in violation of TMC 12.08 originates, as well as other costs.
- TMC 12.08.675.A authorizes the City to issue a Notice of Violation with civil penalties whenever the Director finds that a violation of TMC 12.08 has occurred, or is occurring.
- TMC 12.08.180 A. authorizes the Director to suspend storm drainage services, special approved storm water discharges, and/or wastewater treatment services and suspend or revoke the wastewater discharge permit of a discharger when the Director finds that an actual or threatened discharge threatens to interfere with the operation of the Municipal Sewer System or causes the City to violate its NPDES permit.

6. Definitions

"BMP- Best Management Practices" means schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of FOG to the sanitary sewer system and directly or indirectly to stormwater, receiving waters or to the MS4.

"Food" means any raw, cooked, or processed edible substance, ice, or ingredient used or intended for use or sale in whole or in part for consumption.

“FOG – Fats Oils and Grease” Any fats, oils and grease generated from the food preparation process as identified per the most current EPA method as listed in 40 CFR 136.3

“FOG Device” means a device designed to separate FOG from liquid waste prior to the wastewater entering the sanitary sewer collection system. This includes but is not limited to Gravity Grease Interceptors, Hydro-Mechanical Grease Interceptors, and all other approved alternative engineered pretreatment technology.

“FSE - Food Service Establishments” is a: “Any facility, which serves, prepares, processes, manufactures, or packages food for consumption such as a restaurant, commercial kitchen, caterer, hotel, school, hospital, detention facility, or care institution” per 12.08.010 Definitions.

“TMC – Tacoma Municipal Code” Is a Codification of the General Ordinances of the City of Tacoma, Washington.

“UPC – Uniform Plumbing Code” means the code that governs the requirements for the installation, alteration, removal, replacement, repair or construction of all plumbing.